



Dart Hawkesbury  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**D2654-5**  
**Job Sheet 166663**



Part No: D2654-5

Job Qty: 16 ea

Part Name: Web



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/13/17

Job Tracking No:

Due Date: 10/18/17

Created By: Mario Poulin

Type: Stock

Description:

Note: DWG REV F SHEET 2 IPP Rev:D 99.02.04 Fixed typo, Changed procedure DM

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty    | Due Date | Standard  |         | Workcenter/Supplier   |           |
|-------|--------------------|--------|----------|-----------|---------|-----------------------|-----------|
|       |                    |        |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |
| 90    | Start up Operation | 16 Ea  | 10/17/17 | 0.00      | 0.00    | Start up container    |           |
| 100   | Skidtubes          | 16 pcs | 10/17/17 | 0.00      | 8.74    | Skidtubes             |           |
| 110   | QC                 | 16 pcs | 10/17/17 | 0.00      | 0.00    | QC5                   |           |
| 120   | HandFinish         | 16 pcs | 10/18/17 | 0.00      | 3.81    | HandFinish1           |           |
| 130   | QC                 | 16 pcs | 10/18/17 | 0.00      | 0.00    | QC7                   |           |
| 140   | Packaging          | 16 pcs | 10/18/17 | 0.00      | 0.00    | Packaging3            |           |
| 150   | QC21-SA            | 16 Ea  | 10/18/17 | 0.00      | 0.00    | QC21                  |           |

Part Op 100 - 1-Cut D2600-7 to length as per Dwg D2654 2-Drill pilot holes in web using drill jig DT 8018-5 as per Dwg D2654  
Descriptions: 140 - LOCATION : LG002

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated | Std Qty |
|-----------------------|----------------|----------|-----------|-----------|---------|
| 90-Start up Operation | D2600-7-140    | 16       | 81        | 0         | 0       |

B162496

### Part Specifications

Specifications could not be found.

Plex 10/13/17 9:45 AM dart.poulin.mario

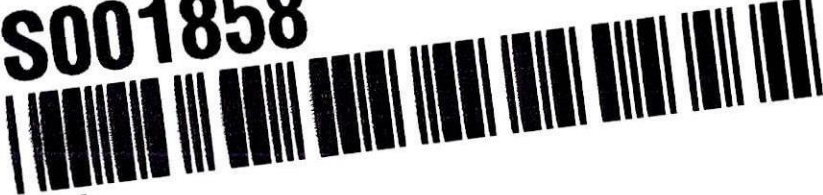
|                                                                                    |                                                                                                                                                                                    |                                                                                                                                                         |                                                                                                                                                       |                                                                                                                             |                                      |                                  |                                |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------|--------------------------------|
| <b>Work Order:</b><br>_____<br><b>Part No.</b><br>_____<br><b>NCR No.</b><br>_____ | <b>DISPOSITION</b><br><br><input type="checkbox"/> Rework<br><input type="checkbox"/> Scrap<br><input type="checkbox"/> Use-as-is<br><input type="checkbox"/> Suspected Unapproved | <input type="checkbox"/> Skid-tube<br><input type="checkbox"/> Machining<br><input type="checkbox"/> Thermforming<br><input type="checkbox"/> Large Fab | <input type="checkbox"/> Cross tube<br><input type="checkbox"/> Small Fab<br><input type="checkbox"/> Finishing<br><input type="checkbox"/> Composite | <input type="checkbox"/> Water Jet<br><input type="checkbox"/> Prod. Eng. Coord.<br><input type="checkbox"/> Rec/Store/Pack | <input type="checkbox"/> Engineering | <input type="checkbox"/> Quality | <input type="checkbox"/> Other |
|                                                                                    |                                                                                                                                                                                    |                                                                                                                                                         |                                                                                                                                                       |                                                                                                                             | <b>AGAINST DEPARTMENT/PROCESS</b>    |                                  |                                |

|                                  |  |                      |
|----------------------------------|--|----------------------|
| <b>Date :</b> _____              |  | <b>Step #:</b> _____ |
| <b>Description Work Order De</b> |  |                      |

**Mfg Date: 10/24/17**  
**Job No: 1666991**

**D2654 - 5**  
**Start up Operation**  
**16**

**PART NO:**  
**Revision:**  
**Operation:**  
**Quantity:**  
**Change No:**

**Web**  
**S001858**  
  
**DART AEROSPACE**

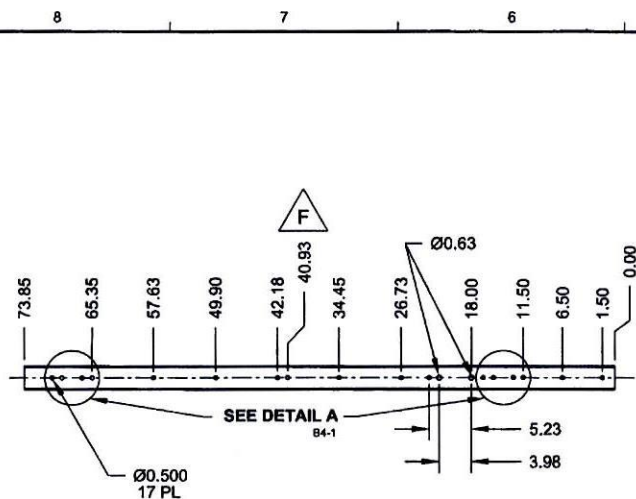
|                            |
|----------------------------|
| Completed By               |
| Hand / Supervisor Approval |
| QA Coordinator Approval    |

|                                                |                                             |
|------------------------------------------------|---------------------------------------------|
| <b>Root Cause</b>                              |                                             |
| <input type="checkbox"/> Environment           | <input type="checkbox"/> Design             |
| <input type="checkbox"/> Doc/Data              | <input type="checkbox"/> Equip/Tooling      |
| <input type="checkbox"/> Handling/Pre          | <input type="checkbox"/> Material           |
| <input type="checkbox"/> Internal Transport    | <input type="checkbox"/> Tribal Knowledge   |
| <input type="checkbox"/> LOA                   | <input type="checkbox"/> Substation         |
| <input type="checkbox"/> Past Expiry Date      | <input type="checkbox"/> Misidentified      |
| <b>Root Cause</b>                              |                                             |
| <input type="checkbox"/> No Re-verification    | <input type="checkbox"/> Operator           |
| <input type="checkbox"/> Offset/Setup          | <input type="checkbox"/> Supplier           |
| <input type="checkbox"/> Training              | <input type="checkbox"/> Use for Testing    |
| <input type="checkbox"/> Poor Information      | <input type="checkbox"/> Rushing            |
| <input type="checkbox"/> Product Improvement   | <input type="checkbox"/> Wave/Twist in Tube |
| <input type="checkbox"/> Process Improvement   | <input type="checkbox"/> Marks/Chatter      |
| <input type="checkbox"/> Manufacturing Process | <input type="checkbox"/> OTHER :            |

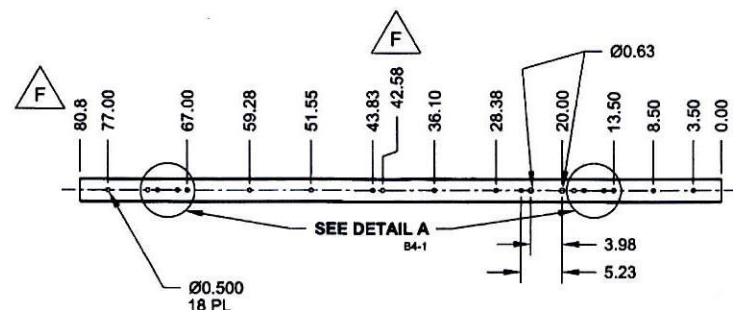
**Dart Aerospace Ltd.**  
1270 Aberdeen Street  
Hawkesbury, ON K64 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

|                                      |                                  |                                     |                                 |                                       |                                |                                   |                                     |                                        |                                        |                                                            |                               |                                             |                                          |                                  |                                     |                                       |                                                |                                           |                                            |                                     |                                  |                                 |                                   |                                               |                                       |                                    |
|--------------------------------------|----------------------------------|-------------------------------------|---------------------------------|---------------------------------------|--------------------------------|-----------------------------------|-------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------------------------|-------------------------------|---------------------------------------------|------------------------------------------|----------------------------------|-------------------------------------|---------------------------------------|------------------------------------------------|-------------------------------------------|--------------------------------------------|-------------------------------------|----------------------------------|---------------------------------|-----------------------------------|-----------------------------------------------|---------------------------------------|------------------------------------|
| <input type="checkbox"/> Pressure/Fr | <input type="checkbox"/> Bending | <input type="checkbox"/> Centre Not | <input type="checkbox"/> Cracks | <input type="checkbox"/> Crimp/Kink/f | <input type="checkbox"/> Cuffs | <input type="checkbox"/> Crushing | <input type="checkbox"/> Heat Treat | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Contamination | <input type="checkbox"/> Inspection Incomplete/Unqualified | <input type="checkbox"/> Weld | <input type="checkbox"/> Wrong Stock Pulled | <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Off-set | <input type="checkbox"/> Mislabeled | <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Misaligned/off center | <input type="checkbox"/> Turning Sequence | <input type="checkbox"/> Part Lost/Missing | <input type="checkbox"/> Part Moved | <input type="checkbox"/> Drawing | <input type="checkbox"/> Finish | <input type="checkbox"/> Mismatch | <input type="checkbox"/> Over/Under tolerance | <input type="checkbox"/> e Dimensions | <input type="checkbox"/> ned Wrong |
|--------------------------------------|----------------------------------|-------------------------------------|---------------------------------|---------------------------------------|--------------------------------|-----------------------------------|-------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------------------------|-------------------------------|---------------------------------------------|------------------------------------------|----------------------------------|-------------------------------------|---------------------------------------|------------------------------------------------|-------------------------------------------|--------------------------------------------|-------------------------------------|----------------------------------|---------------------------------|-----------------------------------|-----------------------------------------------|---------------------------------------|------------------------------------|

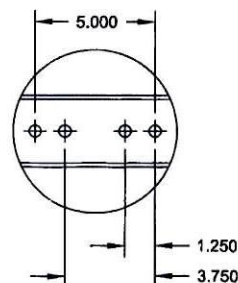




**D2654-1 WEB**



**D2654-3 WEB**



**DETAIL A**

C2-1  
C3-1  
C6-1  
C8-1  
D3-2  
D6-2  
B3-2  
B6-2

**RELEASED**  
2011-09-12

**NOTES:**

- 1) MAKE D2654-1/-3 FROM D2600-5-108 EXTRUSION, MAKE D2654-5/-7 FROM D2600-7-125 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH P/N "D2654-X" PER QSI 044 6.1 (FINE POINT PERMANENT INK MARKER)
- 7) WEIGHT: D2654-1 = 2.2 lbs; D2654-3 = 2.4 lbs  
D2654-5 = 4.8 lbs; D2654-7 = 5.8 lbs

| REV.       | DESCRIPTION                                                                | BY                                                                                                                                                                                                                                                                                                   | DATE         |
|------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| F          | ADDED ADDITIONAL HOLES ON -5/-7. 80.8 WAS 80.5, INCORPORATED DEO D2654-E-2 | SC                                                                                                                                                                                                                                                                                                   | 11.05.05     |
| E          | CHANGE LENGTHS, REFORMAT                                                   | CP                                                                                                                                                                                                                                                                                                   | 04.05.26     |
| D          | GHW HOLES CHANGED TO Ø0.63                                                 | CP                                                                                                                                                                                                                                                                                                   | 98.01.15     |
| C          | CHANGED HOLE PATTERN                                                       | CP                                                                                                                                                                                                                                                                                                   | 97.10.29     |
| B          | ALTER HOLE PATTERN, 0.500 WAS 0.438                                        | CP                                                                                                                                                                                                                                                                                                   | 97.06.28     |
| A          | NEW ISSUE                                                                  | CP                                                                                                                                                                                                                                                                                                   | 97.03.25     |
| DESIGN     | CP                                                                         | <b>DART AEROSPACE USA, INC</b><br>PORT HADLOCK, WA                                                                                                                                                                                                                                                   |              |
| DRAWN      | SC                                                                         |                                                                                                                                                                                                                                                                                                      |              |
| CHECKED    | 9                                                                          | DRAWING NO.                                                                                                                                                                                                                                                                                          | REV. F       |
| MFG. APPR. | 9                                                                          | D2654                                                                                                                                                                                                                                                                                                | SHEET 1 OF 2 |
| APPROVED   | 9                                                                          | TITLE                                                                                                                                                                                                                                                                                                | SCALE        |
| DE APPR.   | 9                                                                          | WEB                                                                                                                                                                                                                                                                                                  | NTS          |
| DATE       | 11.05.05                                                                   | <small>COPYRIGHT © 1997 BY DART AEROSPACE USA, INC<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESSED CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> |              |

